

Series 3™

Gas Fired, Chimney Vented, Cast Iron Water Boiler

- 84% AFUE
- Electronic ignition
- Equipped with IQ Control System™
- 70 – 280 MBH (7 sizes)
- Industry standard tapping locations, allows easy, direct replacement for thousands of existing boiler installations
- Solid, reliable, American-made cast iron heat exchanger, designed to promote turbulent water flow within the section for efficient heat transfer
- Lifetime limited warranty

IQ control system

- Consists of the Intelligent Hydronic Control and IQ Option Panel



Intelligent Hydronic Control

- Intuitive self-diagnostics
- Combines high limit, relay, and ignition functions into a single module
- Two customizable integrated switching relays for easy addition of additional heating zone or indirect water heater
- Energy saving “thermal purge”, which works by circulating residual warm water (140° or above) in the heating system before firing the boiler

IQ Option Panel

- Enables the easy plug & play installation of optional features such as outdoor reset, LWCO, and high limit



Optional Touchscreen

- LCD displays all boiler settings, diagnostics, and troubleshooting in sentences, not codes



U.S. Boiler Company

Series 3: Technical Information



Standard Equipment

- Insulated sleek, modern jacket
- Integrated draft diverter, damper and connector included
- Heavy gauge 1" and 1-1/2" base insulation
- Intelligent Hydronic Control – Simple self-diagnostic control system with 3-digit readout for status settings and errors
- IQ Option Panel, accepts plug & play IQ Option Cards for
 - Outdoor reset with DHW priority
 - Auto or manual reset low water cutoff
 - Auto auxiliary high limit
- Step-opening redundant gas valve
- Spark ignition with continuous retry
- User-friendly wiring with 120V J-box
- Circulator with piping with wiring harness
- Cast iron section assembly
- Resettable blocked vent switch
- Boiler drain valve
- Cast iron supply manifold with safety relief valve tapping

Series 3 Ratings & Specifications

Model*	Input ¹ (MBH)	DOE Heating Capacity ¹ (MBH)	Net AHRI Rating, Water ^{1,2} (MBH)	AFUE%	Vent Size (Inches)	Approx. Shipping Weight. (lbs.)
303	70	59	51	84.0	4	254
304	105	88	77	84.0	5	301
305	140	117	102	84.0	6	353
306	175	146	127	84.0	6	405
307	210	176	153	84.0	7	464
308	245	205	178	84.0	7	514
309	280	234	203	84.0	8	564

* Add suffix "N" for natural gas, or suffix "L" for LP gas models

1. Ratings shown are based on certification up to 2,000 ft. Above 2,000 ft. ratings decrease by 2.5% per 1,000 ft. above sea level. Altitude kits required above 5,400 ft. See altitude conversion kits below.

2. Net AHRI Water Ratings shown based on a piping and pickup allowance of 1.15. Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

3. All boilers ship with 30 psi relief valve. MAWP is 50 psi.

Series 3 Dimensions & Connections

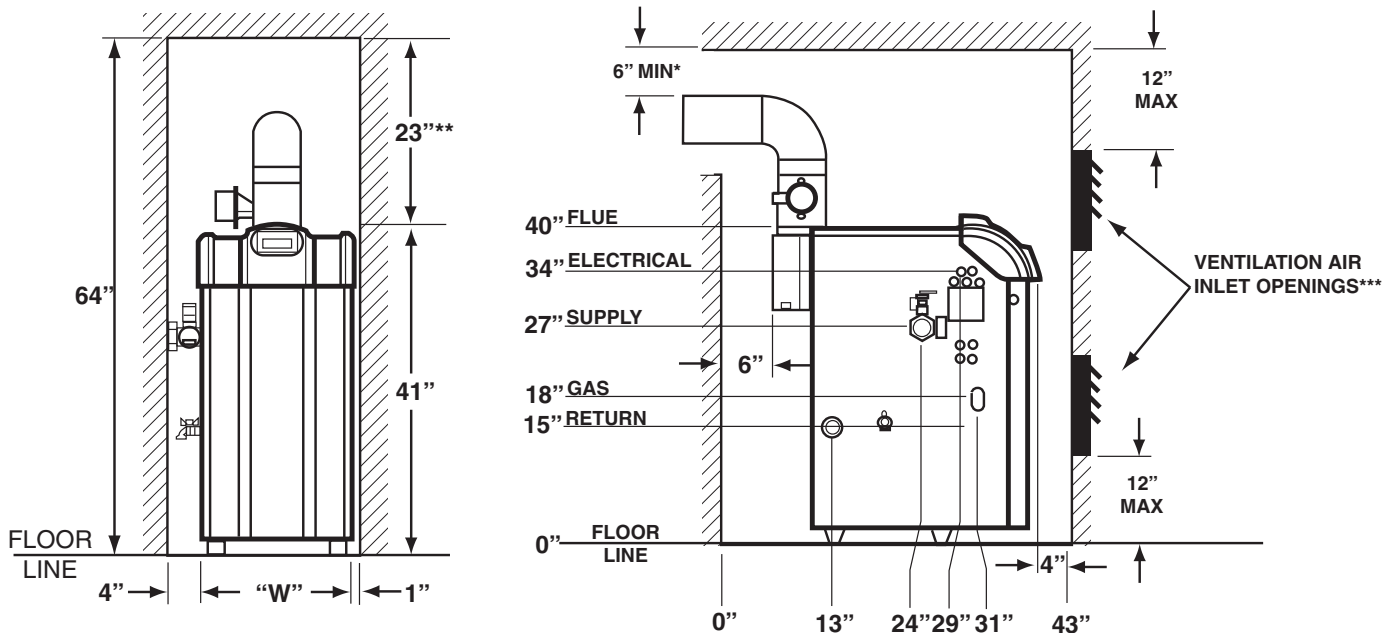
Model	Dimensions (inches)			Connections (inches)				Water Content (gal.)
	Width	Height	Depth	Supply	Return	Gas Valve	Relief Valve	
303	12-3/4	41	33	1-1/4	1-1/4	1/2	3/4	2
304	15-1/2	41	33	1-1/4	1-1/4	1/2	3/4	3
305	18-1/2	41	33	1-1/4	1-1/4	1/2	3/4	4
306	21-1/2	41	33	1-1/4	1-1/4	1/2	3/4	5
307	24-3/4	41	33	1-1/4	1-1/4	3/4	3/4	6
308	27-3/4	41	33	1-1/4	1-1/4	3/4	3/4	7
309	30-3/4	41	33	1-1/4	1-1/4	3/4	3/4	8

Accessories

- Altitude conversion kit - natural gas (P/N: 112461-01)
- Altitude conversion kit - LP gas (P/N: 112462-01)

NOTES:

Required above 5,400 ft., kits do not convert gas type



NOTES:

CAUTION: Chimney liner may be required by code requirements

* Minimal radial distance around vent pipe and breeching

** Add height required to maintain 6" clearance from all breeching components

*** Area of each opening 1 sq. inch for each 1,000 BTUH input - with minimum of 100 sq. inches. Height of opening should be half the width.